

Work Order ID 93209

93209

Page 1

November-15-12 9:24:05 AM

Item ID: 647.9017

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Doubler

Start Date: 11/15/12 Start Qty: 60.00

60

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 60.00

60

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: MLJ Date: 12-11-16 Tooling: _____ Date: _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

647.9000

n/c

0.00

110

Waterjet

0.00

FLOW CNC Waterjet

Memo

1-Cut as per Dwg

Dwg Rev: ML

Prog Rev: N/L

2-Deburr if necessary

120

QC2- Inspect parts off machine FAI/FAIB

0.00

120

QC

Memo

0.00

Quality Control:

(17)

B12-11-19

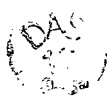

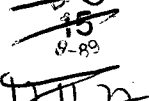


(17)

B12-11-19

NCR: ☒ Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: AKH Date: 13/05/15QA Closed: CK Date: 13/5/23

Work Order: <u>93209</u> Part No. <u>647.9017</u> NCR No. <u>13-2644</u>				DISPOSITION Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input checked="" type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Material <input type="checkbox"/> Setup <input checked="" type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>	<u>12/12/22</u>	<u>H 110</u>	<u>1</u>	<u>parts deep move on the water jet Q11 ①</u> <u>RC misshandling by operator</u>	 <u>13/05/22</u>	<u>Destroyed part</u> <u>no replace other</u> <u>cut</u> <div style="border: 2px solid black; border-radius: 50%; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center; margin: 10px;"> <u>9.32</u> </div>	 <u>12/12/22</u>	 <u>12/12/22</u>  <u>13/05/22</u>	 <u>13/05/22</u> <u>Q22air</u>		
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input checked="" type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other			

Work Order ID 93209

93209

Page 4

November-15-12 9:24:05 AM

Item ID: 647.9017

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Doubler

Start Date: 11/15/12 Start Qty: 60.00

60

Cust Item ID:

Required Date: 12/07/12 Req'd Qty: 60.00

60

Customer:

Reference:

Run Start *NR1*

Approvals: Process Plan: Date: Tooling: Date:

Stop *NR2*

QC: Date: SPC (Y/N): Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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190

0.00

190

SprayPaint

Memo

0.00 1

Spray Painting

PRIME IAW MIL-P-23377J TYPE1 CLASS N AS PER DWG. (SEE NOTE 2)

PRIMER BATCH: 125452

116

0

0

13

13-5-11

200

QC14- Inspect Spray Paint

0.00

200

QC

Memo

0.00

Quality Control

116

DAS
05
9-89

13-05-18

210

Identify as per dwg & Stock Location

0.00

210

Packaging

Memo

0.00

Packaging

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

DAS
06
9-89

116

13/5/21

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Work Order ID 93209

93209

Page 5

November-15-12 9:24:05 AM

Item ID: 647.9017 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Doubler
 Start Date: 11/15/12 Start Qty: 60.00 *60* Cust Item ID:
 Required Date: 12/07/12 Req'd Qty: 60.00 *60* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
220	QC21- Final Inspection - Work Order Release	0.00							
220									
QC	Memo	0.00							
Quality Control									

13/5/21

10/3-521

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

Picklist Print

November-15-12 9:24:05 AM

Page 1

Work Order ID: 93209

Parent Item: 647.9017

Parent Item Name: Doubler

Start Date: 11/15/12

Required Date: 12/07/12

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP REV: A 12.11.01 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.063 2024-T3 .063 sheet		Purchased	No			110	sf	244.4200	0.045	2.8421053	61	12-11-12	

Location

Loc Qty

Loc Code

MAT022

244.42

119916

0.1

121197

16.32

123654

36

123701

192

123701

(17)

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION <div style="display: flex; justify-content: space-around;"> <div>Rework <input type="checkbox"/></div> <div>Skid-tube <input type="checkbox"/></div> <div>Crosstube <input type="checkbox"/></div> <div>Water Jet <input type="checkbox"/></div> <div>Engineering <input type="checkbox"/></div> </div> <div style="display: flex; justify-content: space-around;"> <div>Scrap <input type="checkbox"/></div> <div>Machining <input type="checkbox"/></div> <div>Small Fab <input type="checkbox"/></div> <div>Prod. Eng. Coord. <input type="checkbox"/></div> <div>Quality <input type="checkbox"/></div> </div> <div style="display: flex; justify-content: space-around;"> <div>Use-as-is <input type="checkbox"/></div> <div>Thermoforming <input type="checkbox"/></div> <div>Finishing <input type="checkbox"/></div> <div>Rec/Store/Packaging <input type="checkbox"/></div> <div>Other <input type="checkbox"/></div> </div> <div style="display: flex; justify-content: space-around;"> <div>Work Order Update <input type="checkbox"/></div> <div>Large Fab <input type="checkbox"/></div> <div>Composite <input type="checkbox"/></div> <div>Supplier <input type="checkbox"/></div> </div>		AGAINST DEPARTMENT/PROCESS					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTIC NO. 03266		SHEET 1 OF 2	
DWG NO. 647.9000	REV: N/C	PREPARED BY A. QUAN	DATE: 11/15/11
EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.			
DWG TITLE: SHEETMETAL			
APPROVED BY: ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: CURRENT ORDER AND STOCK
REASON: REVISED 647.9014 MATERIAL, REVISED DIMENSIONS OF P/N 647.9012			

TRANSACTION CODES (TC)
A-ADD C-CREATE
R-REVISE D-DELETE

SHEET 1, NOTES:

NOTES: UNLESS OTHERWISE SPECIFIED

- 1 MATERIAL: ALUMINUM 2024-T3 PER AMS-QQ-A-250/4
- 2 FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;
PRETREAT PR-148 ADHESION PROMOTER, PRIME IAW MIL-P-23377J, TYPE I, CLASS N
3. DEBURR AND BREAK ALL SHARP EDGES
4. IDENTIFY IAW MPP-120. LASER ETCH P/N AND REVISION 12PT. CENTURY GOTHIC.
5. ALL DIMENSIONS SHOWN PRIOR TO FINISH.
- 6 PART DIMENSIONS CONTROLLED BY CAD MODEL; FILE NAME: 647.9016 DOUBLER.SLDPRD-LAST MODIFIED 06-29-10
7. INSPECTION DIMENSIONS SHOWN WITH FINISH APPROX. 3-5 MIL MAX PER FACE.
- 8 MATERIAL: 304SS IAW AMS 5643
- 9 FINISH: PRIME IAW MIL-P-23377J, TYPE I, CLASS N

IS

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 93209 MCT
12-11-16

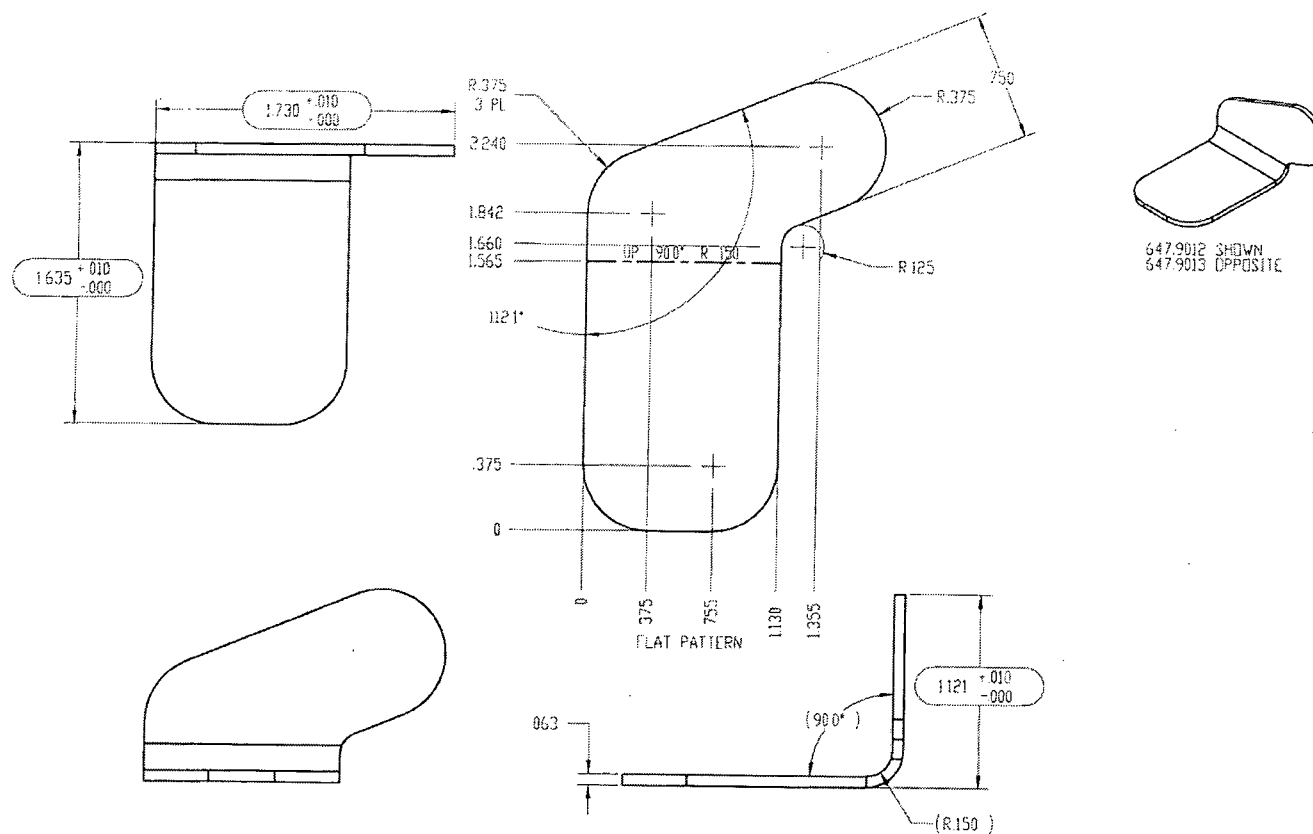
5	R	647.9014		STRUT BRACKET	8	9
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input checked="" type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

93209

APICAL INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03266

SHEET 1 OF 2

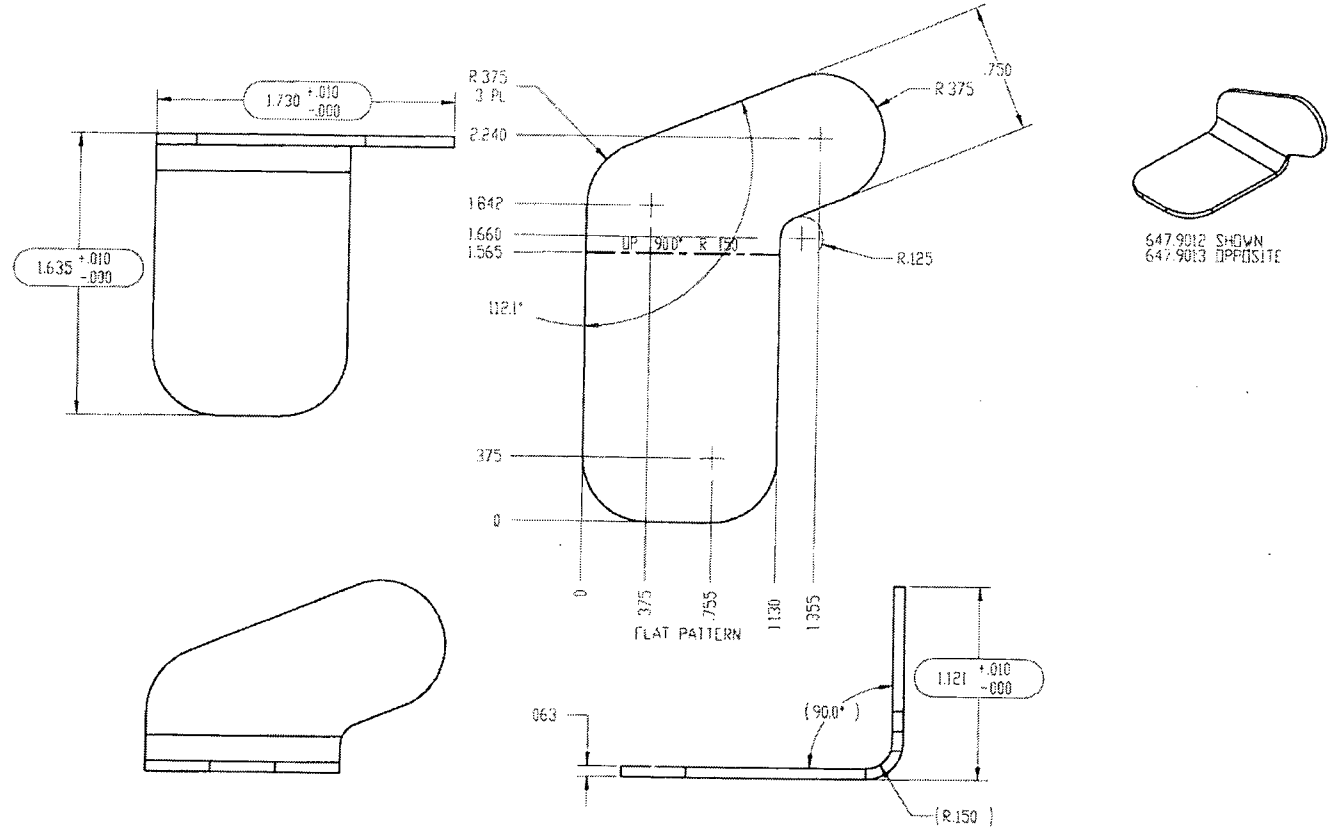
SHEET 3, IS:

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION

93209

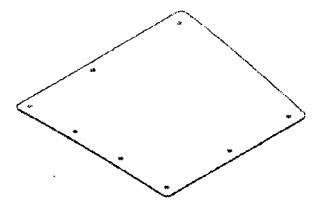
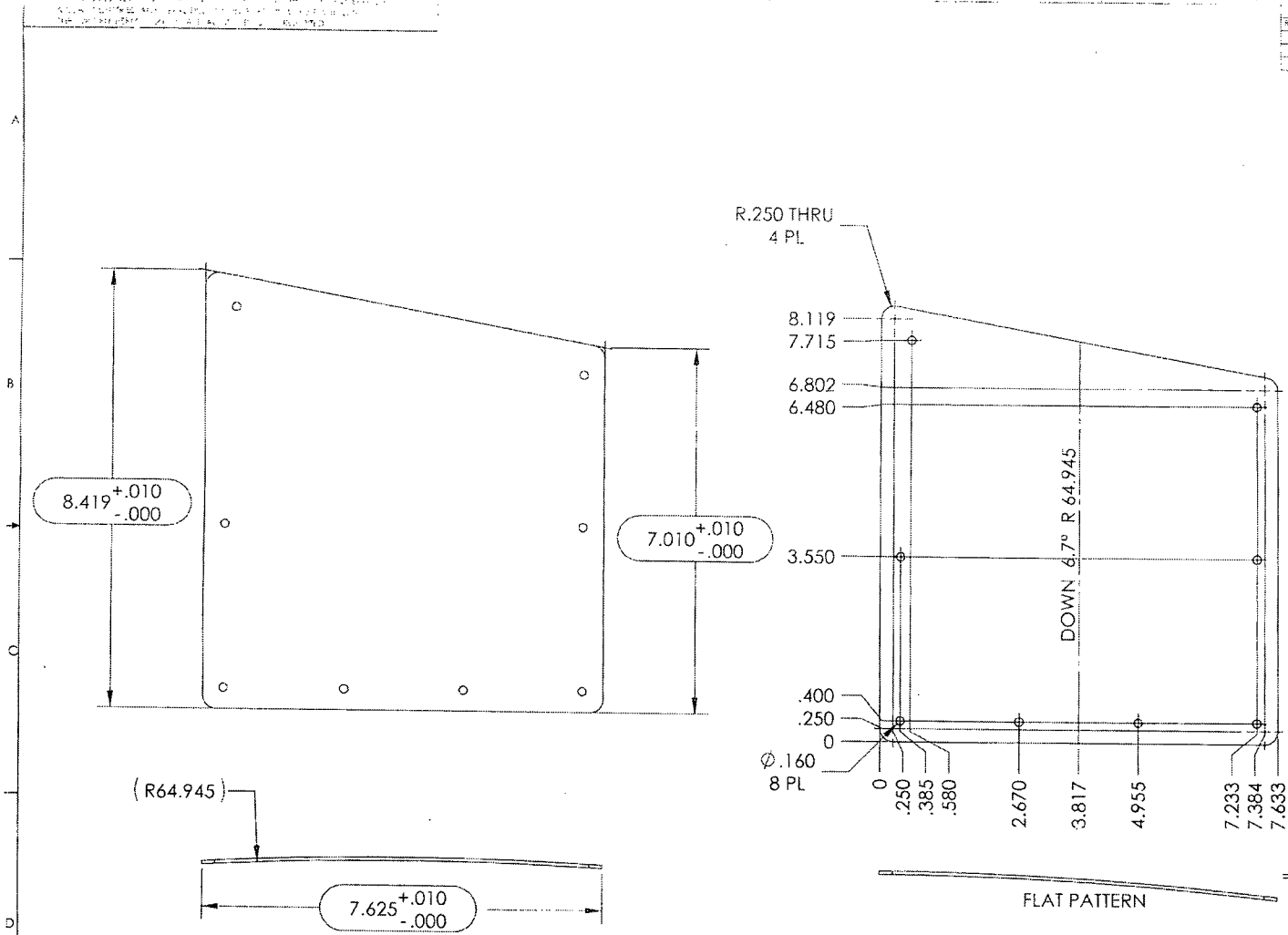
APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTIC NO. 03213			SHEET 1 OF 1	
	DWG NO. 647.9000	REV: N/C	PREPARED BY A. QUAN	DATE: 11/09/11	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.
	DWG TITLE: SHEETMETAL				
	APPROVED BY: ENGR. <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: CURRENT ORDER AND STOCK	
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: REVISED 647.9013 DIMENSIONS				

SHEET 3, IS:



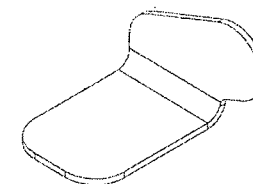
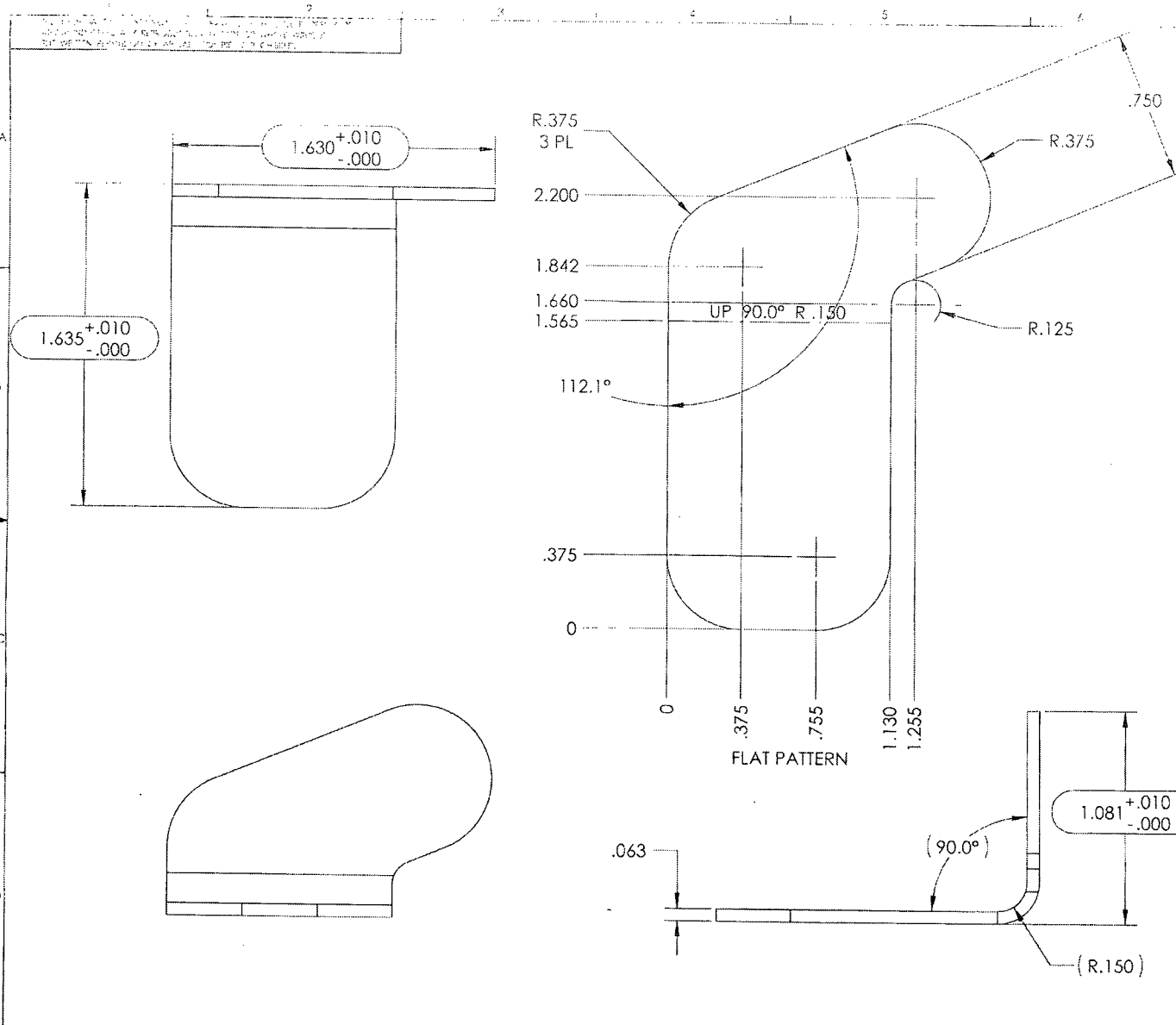
F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

93209



647.9010 SHOWN
647.9011 OPPOSITE

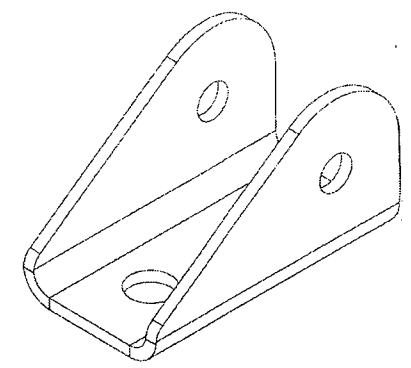
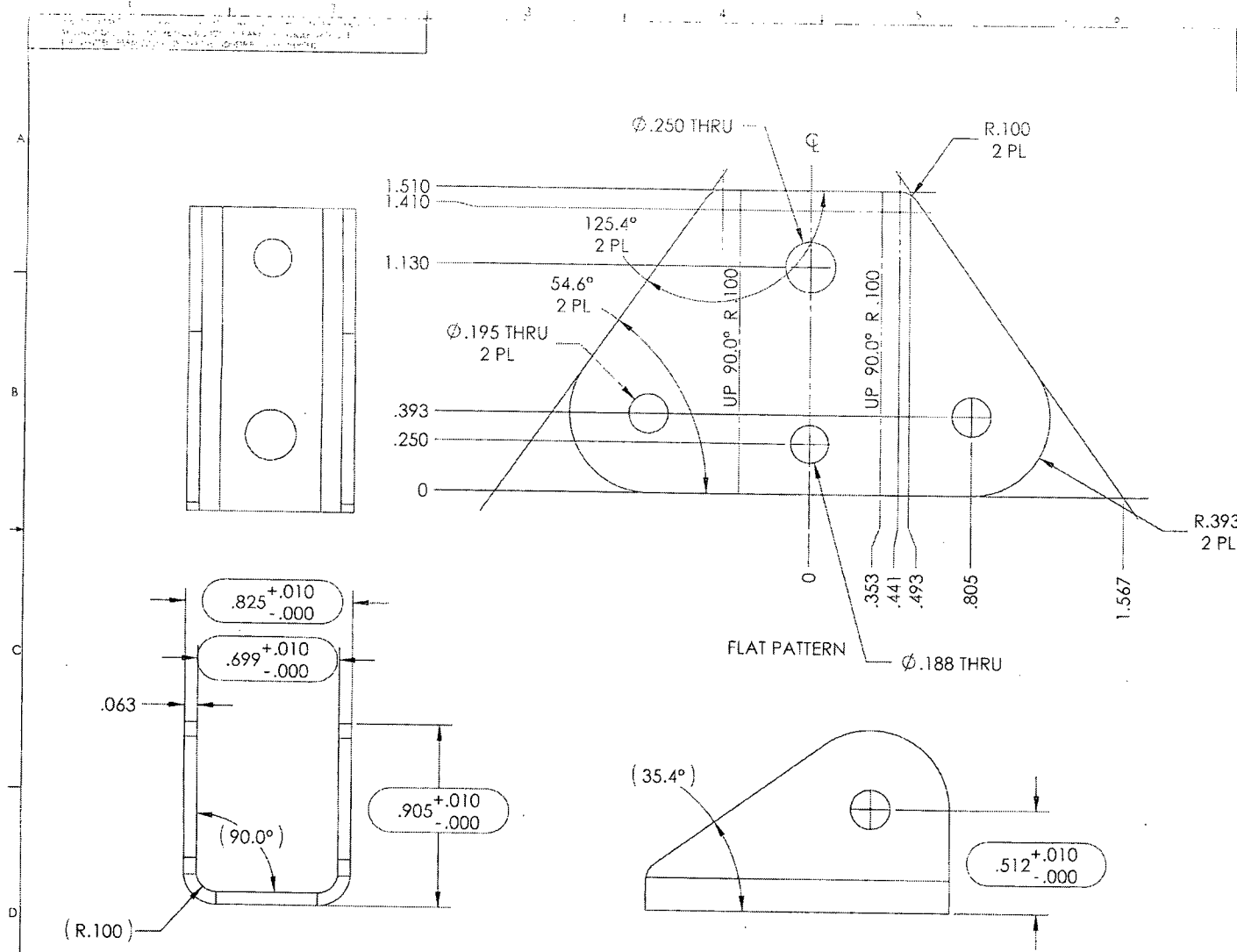
ORIGINAL DATE 04-13-70		APICAL INDUSTRIES	
DESIGNED BY P. ROUANO		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL P. ROUANO		SHEETMETAL	
CONTRACTING		Dwg. NO. 647.9000	
ALL DIMENSIONS SHOWN UNLESS OTHERWISE SPECIFIED IN PARAGRAPHS STANDARD DIMENSIONS ANGLES ± .5°		REV. 8	REV. N/A
SCALE: NONE		SHEET 2 OF 9	



647.9012 SHOWN
647.9013 OPPOSITE

ORDER DATE (MM-DD-YY) 04-13-10 DRAWN BY P. KOSCHKE CHECKED BY P. KOSCHKE DRAWING APPROVAL 5 APPROV DESIGNED BY 1 (UNLESS NOTED) MD	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300 SHEETMETAL															
UNLESS OTHERWISE SPECIFIED UNITS ARE IN INCHES 1. COILS 24" X 36" 2. PLATE DECIMALS ±.01 3. PLATE DECIMALS 2000 4. THICKNESS 2	<table border="1"><thead><tr><th>REF</th><th>CAGE CODE</th><th>QTY. REQ.</th><th>QTY.</th><th>N/C</th></tr></thead><tbody><tr><td>1</td><td>07M16</td><td>647.9000</td><td></td><td></td></tr><tr><td colspan="2">SCALE NONE</td><td colspan="3">SHEET 3 OF 9</td></tr></tbody></table>	REF	CAGE CODE	QTY. REQ.	QTY.	N/C	1	07M16	647.9000			SCALE NONE		SHEET 3 OF 9		
REF	CAGE CODE	QTY. REQ.	QTY.	N/C												
1	07M16	647.9000														
SCALE NONE		SHEET 3 OF 9														

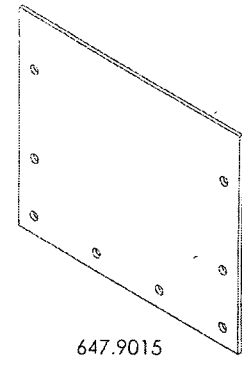
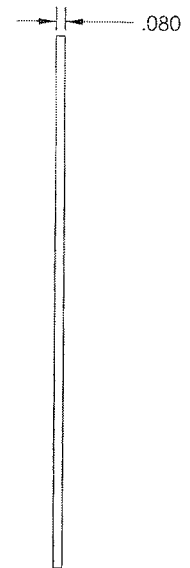
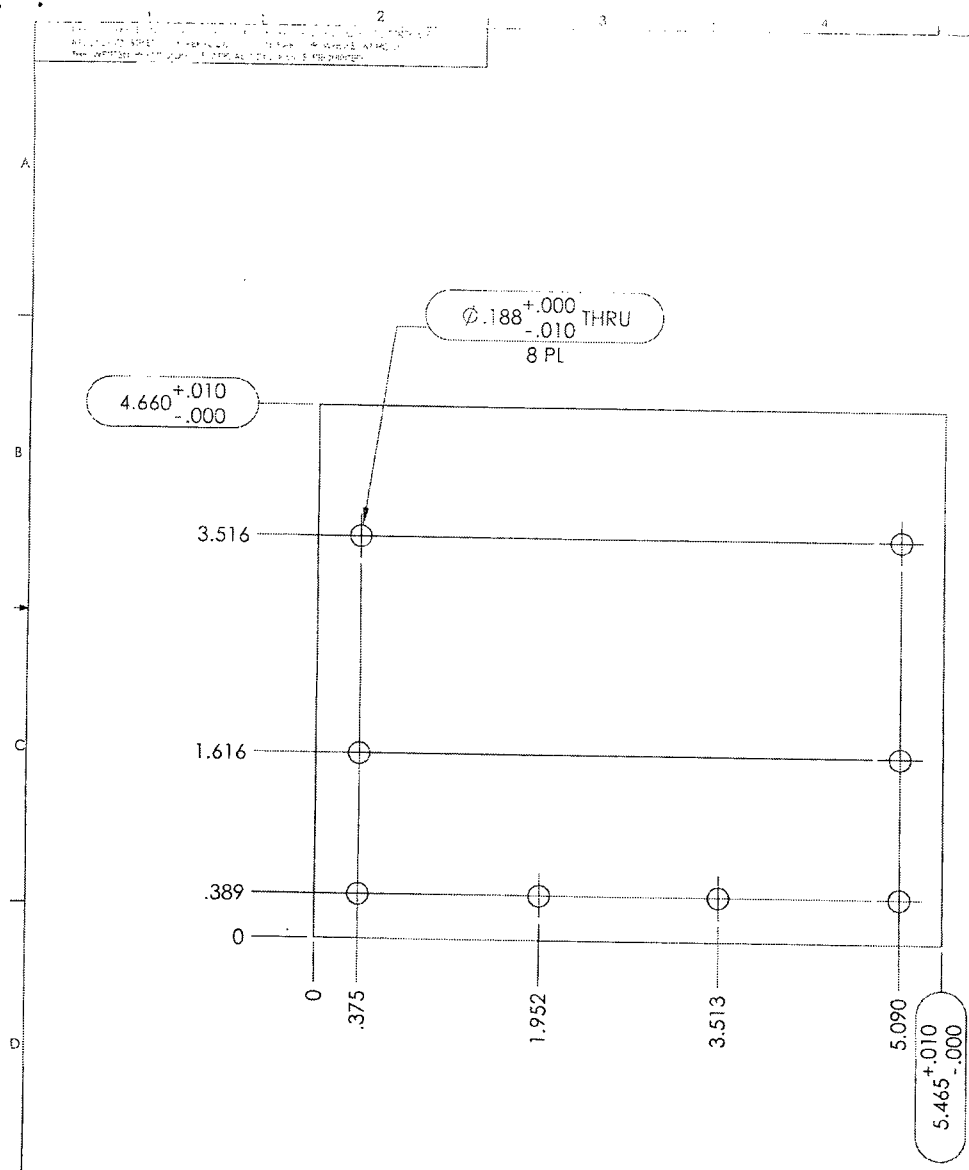
93209



647.9014

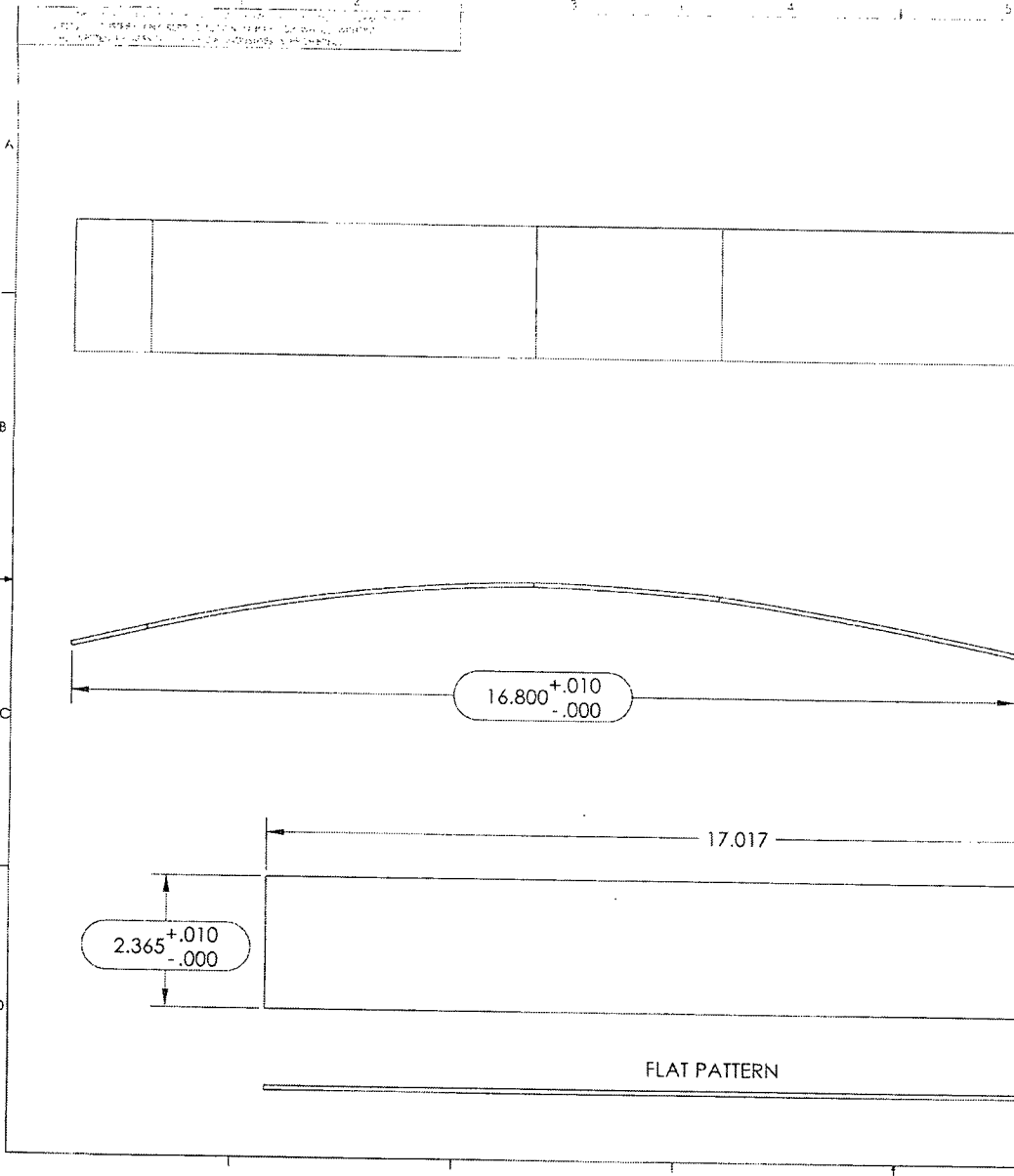
ORIGINAL DATE REV. DATE / REV.		APICAL INDUSTRIES	
DRAWN BY P. ROSA NO.		2608 TEMPLE HEIGHTS DR.	
CHECKED BY P. ROSA NO.		OCEANSIDE, CA. 92056-3512 (760)724-5300	
APPROVED BY P. ROSA NO.		SHEETMETAL	
CONTRACT NO.			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 3 PLACE DECIMALS: .001 2 PLACE DECIMALS: .005 ANGLES: ± .5°		SHEET B	REV. N/C
CAGE CODE 07M16		DWG. NO. 647.9000	SCALE NONE
		SHEET 4 OF 9	

93209

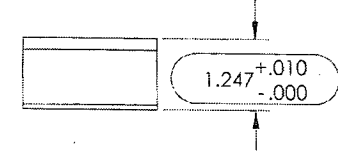
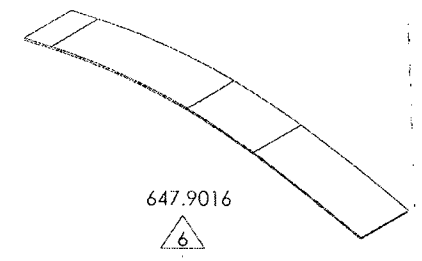


APICAL INDUSTRIES 2409 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
SHEETMETAL	
DWG. DATE: 04-13-10 DESIGNED BY: S. HEDGECOCK D. ROSARIO DRAWING APPROVAL: S. ROSARIO CHECKED BY: S. ROSARIO	REV: B CHG CODE: 07M26 SCALE: NONE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS: .005 3 PLACE DECIMALS: .0005 ANGLES: .5°	DWG. NO.: 647.9000 REV: N/C SHEET: 5 OF 9

93209

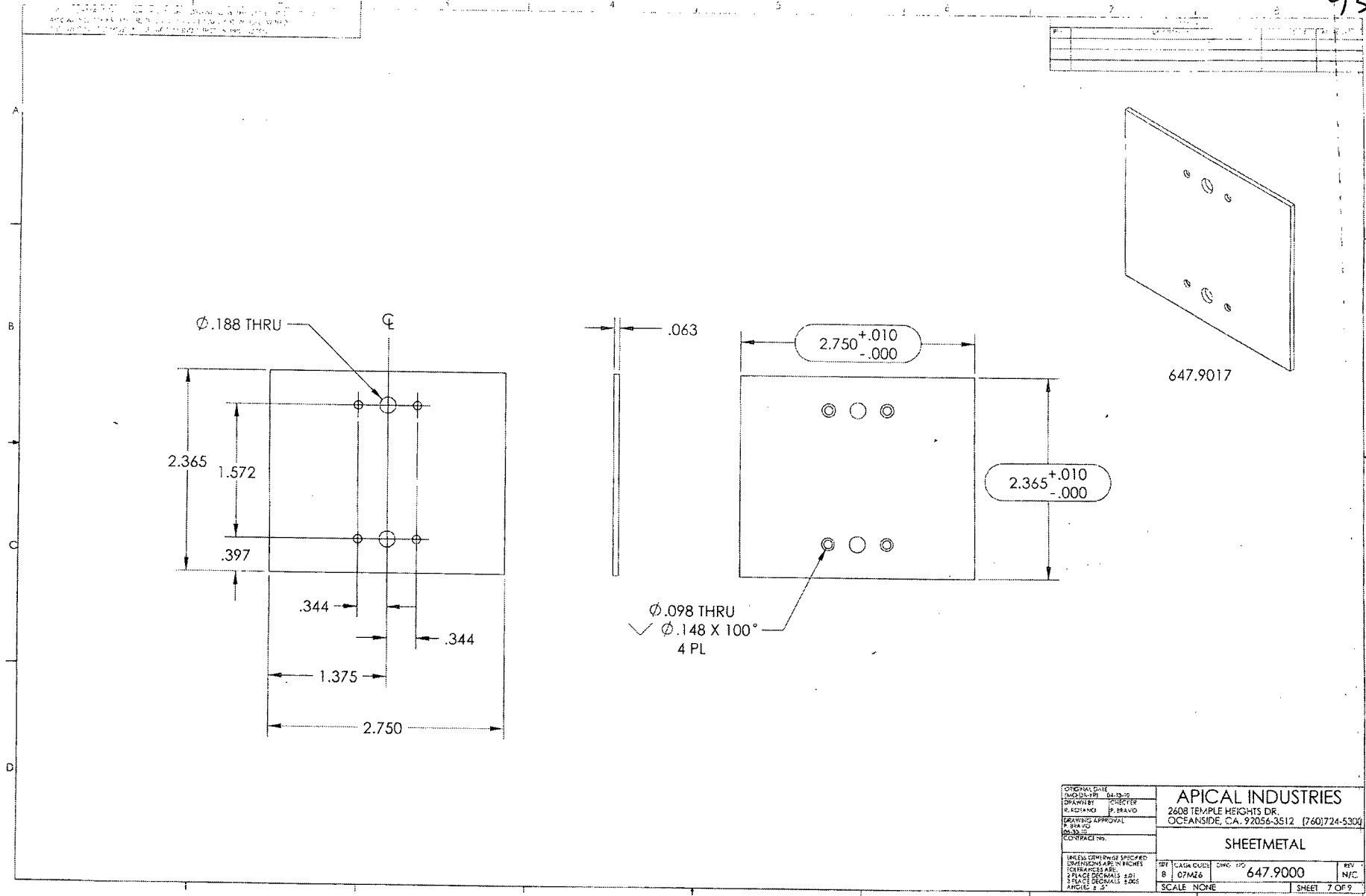


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ORIGINAL DATE 04-15-10		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWN BY R. ROSAND		SHEETMETAL	
CHECKED BY P. BRAVO		647.9000	
DRAWING APPROVAL P. BRAVO		N/C	
CONTRACT NO.		SCALE NONE	
1.0015 OHSUWU W/CRIBED 2.0015 HANNA W/INCHES 3.0015 HANNA W/INCHES 4.0015 HANNA W/INCHES 5.0015 HANNA W/INCHES 6.0015 HANNA W/INCHES 7.0015 HANNA W/INCHES 8.0015 HANNA W/INCHES 9.0015 HANNA W/INCHES 10.0015 HANNA W/INCHES 11.0015 HANNA W/INCHES 12.0015 HANNA W/INCHES 13.0015 HANNA W/INCHES 14.0015 HANNA W/INCHES 15.0015 HANNA W/INCHES 16.0015 HANNA W/INCHES 17.0015 HANNA W/INCHES 18.0015 HANNA W/INCHES 19.0015 HANNA W/INCHES 20.0015 HANNA W/INCHES 21.0015 HANNA W/INCHES 22.0015 HANNA W/INCHES 23.0015 HANNA W/INCHES 24.0015 HANNA W/INCHES 25.0015 HANNA W/INCHES 26.0015 HANNA W/INCHES 27.0015 HANNA W/INCHES 28.0015 HANNA W/INCHES 29.0015 HANNA W/INCHES 30.0015 HANNA W/INCHES 31.0015 HANNA W/INCHES 32.0015 HANNA W/INCHES 33.0015 HANNA W/INCHES 34.0015 HANNA W/INCHES 35.0015 HANNA W/INCHES 36.0015 HANNA W/INCHES 37.0015 HANNA W/INCHES 38.0015 HANNA W/INCHES 39.0015 HANNA W/INCHES 40.0015 HANNA W/INCHES 41.0015 HANNA W/INCHES 42.0015 HANNA W/INCHES 43.0015 HANNA W/INCHES 44.0015 HANNA W/INCHES 45.0015 HANNA W/INCHES 46.0015 HANNA W/INCHES 47.0015 HANNA W/INCHES 48.0015 HANNA W/INCHES 49.0015 HANNA W/INCHES 50.0015 HANNA W/INCHES 51.0015 HANNA W/INCHES 52.0015 HANNA W/INCHES 53.0015 HANNA W/INCHES 54.0015 HANNA W/INCHES 55.0015 HANNA W/INCHES 56.0015 HANNA W/INCHES 57.0015 HANNA W/INCHES 58.0015 HANNA W/INCHES 59.0015 HANNA W/INCHES 60.0015 HANNA W/INCHES 61.0015 HANNA W/INCHES 62.0015 HANNA W/INCHES 63.0015 HANNA W/INCHES 64.0015 HANNA W/INCHES 65.0015 HANNA W/INCHES 66.0015 HANNA W/INCHES 67.0015 HANNA W/INCHES 68.0015 HANNA W/INCHES 69.0015 HANNA W/INCHES 70.0015 HANNA W/INCHES 71.0015 HANNA W/INCHES 72.0015 HANNA W/INCHES 73.0015 HANNA W/INCHES 74.0015 HANNA W/INCHES 75.0015 HANNA W/INCHES 76.0015 HANNA W/INCHES 77.0015 HANNA W/INCHES 78.0015 HANNA W/INCHES 79.0015 HANNA W/INCHES 80.0015 HANNA W/INCHES 81.0015 HANNA W/INCHES 82.0015 HANNA W/INCHES 83.0015 HANNA W/INCHES 84.0015 HANNA W/INCHES 85.0015 HANNA W/INCHES 86.0015 HANNA W/INCHES 87.0015 HANNA W/INCHES 88.0015 HANNA W/INCHES 89.0015 HANNA W/INCHES 90.0015 HANNA W/INCHES 91.0015 HANNA W/INCHES 92.0015 HANNA W/INCHES 93.0015 HANNA W/INCHES 94.0015 HANNA W/INCHES 95.0015 HANNA W/INCHES 96.0015 HANNA W/INCHES 97.0015 HANNA W/INCHES 98.0015 HANNA W/INCHES 99.0015 HANNA W/INCHES 100.0015 HANNA W/INCHES		SHEET 6 OF 9	

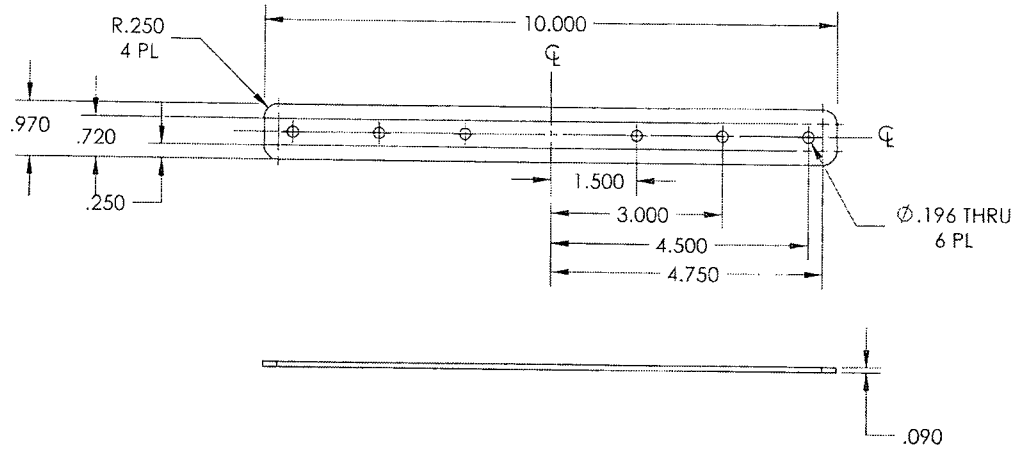
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PR2

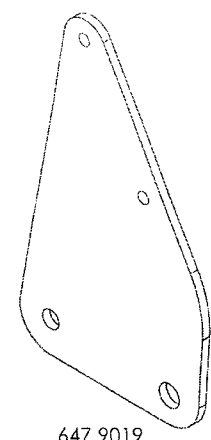
647.9018



ORIGINAL DATE 04-12-12		APICAL INDUSTRIES	
DRAWN BY S. ROSEHO		2608 TEMPLE HEIGHTS DR.	
CHECKED BY S. ROSEHO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL K. ROSEHO		SHEETMETAL	
CONTRACT NO.		647.9000	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ARE 1/16 DECIMALS ARE .001 ANGLES ARE 1°		REV B	NYC
SCALE NONE		SHEET 8 OF 9	

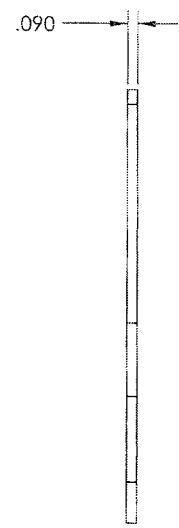
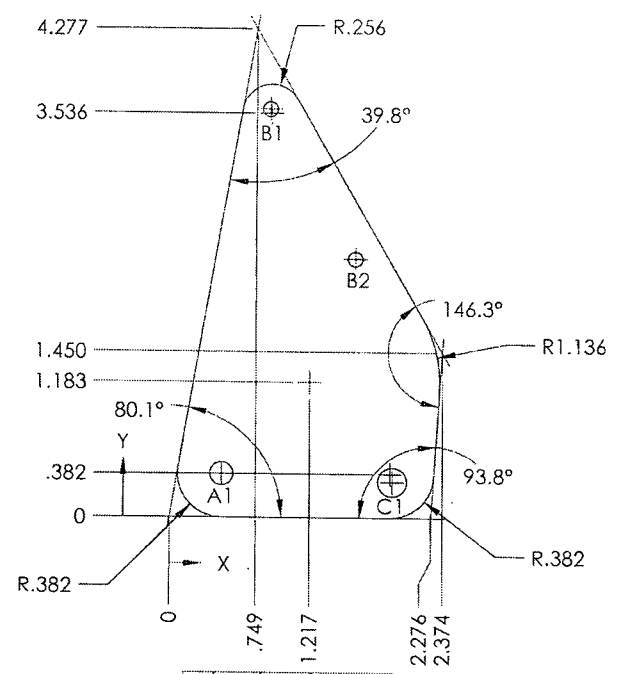
93209

REV	DATE	BY	APP



647.9019

PR2



TAG	X LOC	Y LOC	SIZE
A1	.455	.382	Ø .201 THRU
B1	.867	3.573	Ø .130 THRU
B2	1.614	2.266	Ø .130 THRU
C1	1.939	.312	Ø .250 THRU

ORIGINAL DATE: 04-13-79		APICAL INDUSTRIES	
DRAWN BY: CHETEC		2608 TEMPLE HEIGHTS DR.	
P. ROSSANO		OCEANSIDE, CA. 92056-3512 (760) 724-5300	
DRAWING APPROVAL: P. ROSSANO		SHEETMETAL	
CONSTRUCTION:		REV: N/C	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		SIZE: B	QTY: 100
TOLERANCES ARE:		647.9000	REV: N/C
2 PLACES DECIMALS ±.01		SCALE: NONE	SHEET: 9 OF 9
3 PLACES DECIMALS ±.005			
ANGLES ±.5°			

02.15



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62149

Date: 14 Jan 13

To

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via	
Quantity	Description	Rev:	
1	Part: ASST		
lo	24 PCS 647.2510 PASSIVATE PER QQ-P-35		
	1 PC 647.1613		
	12 PCS 647.1712		
	3 PCS 647.1810		
	40 PCS 647.1812		
	2 PCS 647.1813		
	1 PC 647.1816		
	20 PCS 646.3312		
	10 PCS 646.3714		
	40 PCS 646.3718		
	20 PCS 646.3811		
	6 PCS 647.7910		
	12 PCS 647.7912		
	6 PCS 647.7916		
	40 PCS 647.9012		
	10 PCS 647.9013		
	19 PCS 647.9016		
	30 PCS 647.9016		
	30 PCS 647.9017		
	60 PCS 647.9017 116		
	HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20130027		
	PO: PO18583	Line:	



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62149

Date: 14-Jan-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Canada

Ship To

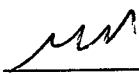
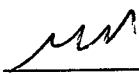
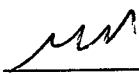
DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms	Ship Via				
<table border="1"><thead><tr><th>Quantity</th><th>Description</th></tr></thead><tbody><tr><td></td><td><p align="center">Certificate of Conformance</p><p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p><p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p><p>DATE : <u>14/1/13</u></p><p>CERTIFIED SIGNATURE : <u></u></p><p>RECEIVER SIGNATURE : _____</p></td></tr></tbody></table>		Quantity	Description		<p align="center">Certificate of Conformance</p> <p>A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.</p> <p align="center">ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY</p> <p>DATE : <u>14/1/13</u></p> <p>CERTIFIED SIGNATURE : <u></u></p> <p>RECEIVER SIGNATURE : _____</p>
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